

Remarks/Arguments:

Claims 1-21 are pending in the above-referenced application. Claims 1, 9 and 17 have been amended. No new material is introduced herein.

Claims 1-3, 6, 9, 10, 16, 17 and 21 were rejected under 35 U.S.C. § 103(a) as obvious over Dobusch et al. (U.S. Patent No. 6,850,276), Gowda et al. (U.S. Patent No. 6,275,259) and Fearnside et al. (U.S. Patent No. 4,278,995). Claims 4, 5, 8, 11-14, 18 and 19 were rejected under 35 U.S.C. § 103(a) as obvious over Dobusch, Gowda, Fearnside and Kim (U.S. Patent No. 6,587,144). Claims 7, 15 and 20 were rejected under 35 U.S.C. § 103(a) as obvious over Dobusch, Gowda, Fearnside and Embler (U.S. Patent No. 6,654,054). Applicants request reconsideration. In particular, neither Dobusch, nor Gowda, nor Fearnside, nor Kim, nor Embler, nor their combination, disclose or suggest the following limitations of claim 1:

...providing a high signal and a low signal based on an image signal of a previously processed pixel of the multicolor pixel array...

...digitizing an analog signal of a current pixel of the multicolor pixel array, which has the same color designation as the previously processed pixel and is separated from the previously processed pixel by at least one pixel in the multicolor pixel array having a different color designation than the current pixel (Emphasis added)

Claims 9 and 17 include similar recitations. Basis for this amendment may be found, for example, at page 7, lines 16-21 and at page 8, lines 1-7.

Dobusch discloses a system for detecting brightness signals from a series of pixels. As shown in Fig. 1, the system uses a working value determined for a previous pixel as the gain factor for processing the next successive pixel. (See column 2, lines 42-62). Because Dobusch's system operates on successive pixels, Dobusch does not disclose or suggest "digitizing an analog signal of a current pixel of the multicolor pixel array, which has the same single color designation as the previously processed pixel and is separated from the previously processed pixel by at least one pixel in the multicolor pixel array having a different color designation than the current pixel . . .," as required. Accordingly, Dobusch does not disclose all features of Applicant's amended claims 1, 9 and 17.

Gowda discloses an automatic gain control circuit. The gain control circuit uses values from a previous frame to operate on the next successive frame. (See column 2, line 47 to column 3, line 10). Because Gowda's circuit operates on minimum and maximum values from successive frames, Gowda does not disclose or suggest "digitizing an analog signal of a current

pixel of the multicolor pixel array, which has the same single color designation as the previously processed pixel and is separated from the previously processed pixel by at least one pixel in the multicolor pixel array having a different color designation than the current pixel . . . ,” as required. Accordingly, Gowda does not disclose the features of Applicant’s amended claims 1, 9 and 17 that are missing from Dobusch.

Fearnside relevantly discloses three separate arrays. Each of the three separate arrays includes pixels which all have the same single color designation. A single color filter is disposed over each respective one of the three separate arrays, “thereby obviating the need to define a separate filter over each element of each array.” (See column 2, lines 6-29). Fearnside, however, does not disclose use of a multicolor array. Additionally, Fearnside does not disclose or suggest “digitizing an analog signal of a current pixel of the multicolor pixel array, which has the same single color designation as the previously processed pixel and is separated from the previously processed pixel by at least one pixel in the multicolor pixel array having a different color designation than the current pixel . . . ,” as required. Accordingly, Fearnside does not disclose or suggest the features of Applicant’s amended claims 1, 9 and 17 that are missing from Dobusch and Gowda.

Kim discloses an analog signal processing apparatus. As shown in Fig. 3, the apparatus includes a correlated double sampling (CDS) circuit 100, an automatic gain control (AGC) circuit 200, an A/D and converter 300 and a black level clamp circuit 400. CDS 11 adjusts a DC level of a video signal output from a CCD using a black level as a reference. AGC 200 adjusts the gain of the signal output from CDS 11. A/D 300 converts the signal to a digital image signal. Black level clamp circuit 400 clamps the black level of the signal output from A/D 300 and feeds the clamped black level back to CDS 100. (See column 3, line 39 through column 4, line 24). Kim processes the pixels of a single video signal successively and, so, does not disclose “digitizing an analog signal of a current pixel of the multicolor pixel array, which has the same single color designation as the previously processed pixel and is separated from the previously processed pixel by at least one pixel in the multicolor pixel array having a different color designation than the current pixel . . . ,” as required. Thus, Kim does not disclose the features of claims 1, 9 and 17, as amended that are missing from Dobusch, Gowda and Fearnside.

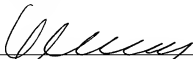
Embler discloses a method and apparatus for canceling noise in an electronic signal. The apparatus relevantly includes a control means, a storage means and a summing circuit. The control means controls timing of a noise signal generated by a source. The storage means stores an anti-noise signal, which is a complement of the noise signal. The summing circuit sums the noise and anti-noise signals together. (See column 6, line 58 through column 7, line

59). Embler does not disclose "digitizing an analog signal of a current pixel of the multicolor pixel array, which has the same single color designation as the previously processed pixel and is separated from the previously processed pixel by at least one pixel in the multicolor pixel array having a different color designation than the current pixel . . .," as required. Thus, Embler does not disclose the features of claims 1, 9 and 17, as amended that are missing from Dobusch, Gowda, Fearnside and Kim.

Because neither Dobusch, nor Gowda, nor Fearnside, nor Kim, nor Embler, nor their combination, disclose or suggest these limitations of claims 1, 9 and 17, these claims are not subject to rejection under 35 U.S.C. § 103(a) as being obvious over Dobusch, Gowda and Fearnside. Claims 2-8 depend from claim 1; claims 10-16 depend from claim 9; and claims 18-21 depend from claim 17. Accordingly, claims 2-3, 6, 10, 16 and 21 are not subject to rejection under 35 U.S.C. § 103(a) as being obvious over Dobusch, Gowda and Fearnside, claims 4-5, 8, 11-14 and 18-19 are not subject to rejection under 35 U.S.C. § 103(a) as being obvious over Dobusch, Gowda, Fearnside and Kim and claims 7, 15 and 20 are not subject to rejection under 35 U.S.C. § 103(a) as being obvious over Dobusch, Gowda, Fearnside and Embler, for at least the same reasons as the claims from which they depend.

In view of the foregoing amendments and remarks, Applicant requests that the Examiner reconsider and withdraw the rejection of claims 1-21.

Respectfully submitted,



Kenneth N. Nigon, Reg. No. 31,549
Attorney for Applicant

KNN/DK/mc

Dated: December 12, 2007